

IN THE CLAIMS

Please amend the claims as follows:

1. (Original) In a PCM modem system having an analog and digital modem coupled together via a communications channel and in which training sequences are transmitted from the analog modem to the digital modem and from the digital modem to the analog modem during the startup mode, a method for reconfiguring either modem transmitter parameters during a data mode, comprising the steps of:

detecting a predetermined modem system characteristic;
generating new transmitter parameters as a result of the detection of the predetermined characteristic; and,
transmitting the new transmitter parameters to a modem in the data mode without switching back to the startup mode.

2. (Original) The method of Claim 1, wherein the predetermined modem system characteristic is a measured communications channel characteristic, wherein the communications channel is measured at one modem and wherein the new transmitter parameters are sent from the modem at which the channel is measured to the modem to which it is coupled.

3. (Original) The method of Claim 2, wherein the communications channel is measured at the digital modem.

4. (Original) The method of Claim 3, wherein the transmitter parameters include precompensation parameters, wherein the measurement taken at the digital modem measures channel impairment and wherein new transmitter precompensation parameters which are the result of measured channel impairment are transmitted to the analog modem to reconfigure the analog modem transmitter without switching out of the data mode.

5. (Original) The method of Claim 2, wherein the communications channel is measured at the analog modem.

6. (Original) The method of Claim 5, wherein the measurement taken at the analog modem measures downstream channel quality and wherein data which is the result of measuring an increase or decrease in the downstream channel quality is sent to the digital modem without switching out of the data mode for the reconfiguring of the transmit parameters of the digital modem.

7. (Original) The method of Claim 5, wherein the new transmitter parameters include constellation parameters and wherein the new constellation parameters are derived from measuring the communications channel at the analog modem and are sent to digital modem by the analog modem without switching out of the data mode for the reconfiguring of the transmit parameters of the digital modem.

8. (Original) The method of Claim 1, wherein the predetermined modem system characteristic is an out-of-limit transmit power level measured at the analog modem and wherein information relating to the out-of-limit transmit power level condition is sent without switching out of the data mode to the digital modem, the digital modem transmitting new parameters to the analog modem in the data mode in response to the information relating to the out-of-limit condition to permit the analog modem to adjust its output power level.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)